



**[4910-13-P]**

**DEPARTMENT OF TRANSPORTATION**

**Federal Aviation Administration**

**14 CFR Part 39**

**[Docket No. FAA-2010-1303; Directorate Identifier 2010-SW-049-AD;**

**Amendment 39-17434; AD 2013-08-17]**

**RIN 2120-AA64**

**Airworthiness Directives; Eurocopter France Helicopters**

**AGENCY:** Federal Aviation Administration (FAA), DOT.

**ACTION:** Final rule.

**SUMMARY:** We are adopting a new airworthiness directive (AD) for Eurocopter France (Eurocopter) Model SA-365N, SA-365N1, AS-365N2, AS 365 N3, and SA-366G1 helicopters. This AD requires an initial and recurring inspection of the 9-degree frame for a crack, and repair of the frame if there is a crack. This AD was prompted by the discovery of a crack in the 9-degree frame of a Eurocopter Model AS-365N2 helicopter, and these cracks could develop on the other specified model helicopters because they contain the same 9-degree frame. The actions specified by this AD are intended to detect a crack in the 9-degree frame to prevent loss of structural integrity and subsequent loss of control of the helicopter.

**DATES:** This AD is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

The Director of the Federal Register approved the incorporation by reference of certain documents listed in this AD as of [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

**ADDRESSES:** For service information identified in this AD, contact American Eurocopter Corporation, 2701 Forum Drive, Grand Prairie, Texas 75053-4005; telephone (800) 232-0323; fax (972) 641-3710; or at <http://www.eurocopter.com>. You may review the referenced service information at the FAA, Office of the Regional Counsel, Southwest Region, 2601 Meacham Blvd., Room 663, Fort Worth, Texas 76137.

#### **Examining the AD Docket**

You may examine the AD docket on the Internet at <http://www.regulations.gov>; or in person at the Docket Operations Office between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this AD, any incorporated-by-reference service information, the economic evaluation, any comments received, and other information. The street address for the Docket Operations Office (phone: 800-647-5527) is U.S. Department of Transportation, Docket Operations Office, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC 20590.

**FOR FURTHER INFORMATION CONTACT:** Gary Roach, Aviation Safety Engineer, Regulations and Policy Group, Rotorcraft Directorate, FAA, 2601 Meacham Blvd., Fort Worth, Texas 76137; telephone (817) 222-5110; email [gary.b.roach@faa.gov](mailto:gary.b.roach@faa.gov).

## **SUPPLEMENTARY INFORMATION:**

### **Discussion**

On January 18, 2011 at 76 FR 2842, the Federal Register published our notice of proposed rulemaking (NPRM), which proposed to amend 14 CFR part 39 to include an AD that would apply to Eurocopter Model SA-365N, SA-365N1, AS-365N2, AS 365 N3, and SA-366G1 helicopters. That NPRM proposed to require an initial and recurring inspections of the inner angles and flanges of the 9-degree frame on the right-hand (RH) and left-hand (LH) sides for a crack. If a crack was found, the NPRM proposed to require, before further flight, repairing the frame. The proposed requirements were intended to detect a crack in the 9-degree frame to prevent loss of structural integrity and subsequent loss of control of the helicopter.

The European Aviation Safety Agency (EASA), which is the Technical Agent for the Member States of the European Union, issued EASA Emergency AD No. 2010-0064-E, dated April 1, 2010, which supersedes EASA Emergency AD No. 2009-0125-E, dated June 12, 2009 (with a correction dated June 15, 2009), to correct an unsafe condition for the specified model helicopters. EASA advises that during a major inspection a crack was found in the 9-degree frame of an AS 365 N2 helicopter, which had logged a total of 10,786 flight hours. The crack was located 230 millimeters above the cabin floor and had grown over a large section of the 9-degree frame on the RH side. EASA states that analysis shows that the time required for initiation of a crack in this area varies according to the weight and balance data of the different aircraft versions.

## **Comments**

We gave the public the opportunity to participate in developing this AD, but we did not receive any comments on the NPRM (76 FR 2842, January 18, 2011).

## **FAA's Determination**

These helicopters have been approved by the aviation authority of France and are approved for operation in the United States. Pursuant to our bilateral agreement with France, EASA, its technical representative, has notified us of the unsafe condition described in the EASA AD. We are issuing this AD because we evaluated all information provided by the EASA and determined the unsafe condition exists and is likely to exist or develop on other helicopters of these same type designs and that air safety and the public interest require adopting the AD requirements as proposed, except we are incorporating figures by reference instead of including them in our AD to meet current publication requirements. This change is consistent with the intent of the proposals in the NPRM (76 FR 2842, January 18, 2011) and will not increase the economic burden on any operator nor increase the scope of the AD.

## **Related Service Information**

Eurocopter has issued Emergency Alert Service Bulletin (EASB), Revision 1, dated March 31, 2010, containing the following three numbers: No. 05.00.57 for FAA type-certificated Model SA-365N and N1, and AS-365N2 and N3 helicopters and for military, not FAA type-certificated, Model AS365F, Fs, Fi, and K helicopters; No. 05.00.25 for military, not FAA type-certificated, Model AS565AA, MA, MB, SA, SB, and UB helicopters; and No. 05.39 for FAA type-certificated Model SA-366G1 helicopters and for military, not FAA type-certificated, Model SA366GA helicopters.

This EASB specifies checking at regular intervals for a crack in the areas of the inner angles and flanges of the 9° frame on the RH and LH sides, near the splice. This EASB also states that Eurocopter is currently studying an improvement (reinforcement) of the frame, which will cancel the checks specified by the EASB. EASA classified this EASB as mandatory and issued AD No. 2010-0064-E, dated April 1, 2010, to ensure the continued airworthiness of these helicopters.

#### **Differences Between this AD and the EASA AD**

We refer to “flight hours” as “hours time-in-service.” We do not refer to the EASB for accomplishment instructions. We do not require contacting the manufacturer for approved repair instructions. We do not allow flight with a known crack. Therefore, we do not revise our required action based on the length and specific location of the crack on the 9-degree frame. We refer to the 9-degree frame rather than the No. 9 frame.

#### **Costs of Compliance**

We estimate that this AD will affect 19 helicopters of U.S. Registry. We also estimate that it will take about 3 work hours for about 12 inspections a year per helicopter. It will take about 24 hours to repair a helicopter frame. The average labor rate is \$85 per work-hour. Required parts will cost about \$3,350. Based on these figures, we estimate the total cost impact of this AD on U.S. operators to be \$68,920 for the fleet, assuming 2 helicopters require repair each year.

#### **Authority for this Rulemaking**

Title 49 of the United States Code specifies the FAA’s authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator.

Subtitle VII: Aviation Programs, describes in more detail the scope of the Agency's authority.

We are issuing this rulemaking under the authority described in Subtitle VII, Part A, Subpart III, Section 44701: "General requirements." Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on helicopters identified in this rulemaking action.

### **Regulatory Findings**

This AD will not have federalism implications under Executive Order 13132. This AD will not have a substantial direct effect on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify that this AD:

- (1) Is not a "significant regulatory action" under Executive Order 12866;
- (2) Is not a "significant rule" under DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979);
- (3) Will not affect intrastate aviation in Alaska to the extent that it justifies making a regulatory distinction; and
- (4) Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

We prepared an economic evaluation of the estimated costs to comply with this AD and placed it in the AD docket.

#### **List of Subjects in 14 CFR Part 39**

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

#### **Adoption of the Amendment**

Accordingly, under the authority delegated to me by the Administrator, the FAA amends 14 CFR part 39 as follows:

#### **PART 39 - AIRWORTHINESS DIRECTIVES**

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

#### **§ 39.13 [Amended]**

2. The FAA amends § 39.13 by adding the following new airworthiness directive (AD):

2013-08-17 **EUROCOPTER FRANCE:** Amendment 39-17434; Docket No. FAA-2010-1303; Directorate Identifier 2010-SW-049-AD.

##### **(a) Applicability.**

This AD applies to Eurocopter France (Eurocopter) Model SA-365N, SA-365N1, AS-365N2, AS 365 N3, and SA-366G1 helicopters, certificated in any category.

##### **(b) Unsafe Condition.**

This AD defines the unsafe condition as a crack in the 9-degree frame, which could result in loss of structural integrity and subsequent loss of control of the helicopter.

**(c) Effective Date.**

This AD becomes effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

**(d) Compliance.**

You are responsible for performing each action required by this AD within the specified compliance time unless it has already been accomplished prior to that time.

**(e) Required Actions.**

(1) On or before the affected model helicopters reach the hours time-in-service (TIS) listed in Table 1 to Paragraph (e)(1) of this AD or within 10 hours TIS, whichever occurs later, and thereafter at intervals not to exceed 110 hours TIS, using a 10X or higher magnifying glass, inspect the inner angles and flanges of the 9-degree fuselage frame on the right-hand and left-hand sides for a crack in the area depicted in Figure 1 and Figure 2 of Eurocopter Emergency Alert Service Bulletin (EASB) No. 05.00.57, Revision 1, dated March 31, 2010, or Eurocopter EASB No. 05.39, Revision 1, dated March 31, 2010, as applicable to your model helicopter.



Table 1 to Paragraph (e)(1)

<b>Helicopter Model</b>	<b>Hours TIS</b>
SA-365N	8,990
SA-365N1	9,990
AS-365N2	3,190
AS 365 N3	2,090
SA-366G1	9,990

(2) If there is a crack, before further flight, repair the frame. Repairing a frame does not constitute terminating action for the repetitive inspection requirements of this AD.

**(f) Alternative Methods of Compliance (AMOCs).**

(1) The Manager, Safety Management Group, FAA, may approve AMOCs for this AD. Send your proposal to: Gary Roach, Aviation Safety Engineer, Regulations and Policy Group, Rotorcraft Directorate, FAA, 2601 Meacham Blvd., Fort Worth, Texas 76137; telephone (817) 222-5110; email [gary.b.roach@faa.gov](mailto:gary.b.roach@faa.gov).

(2) For operations conducted under a 14 CFR part 119 operating certificate or under 14 CFR part 91, subpart K, we suggest that you notify your principal inspector, or lacking a principal inspector, the manager of the local flight standards district office or certificate holding district office, before operating any aircraft complying with this AD through an AMOC.

**(g) Additional Information.**

The subject of this AD is addressed in European Aviation Safety Agency Emergency AD No. 2010-0064-E, dated April 1, 2010.

**(h) Subject.**

Joint Aircraft Service Component (JASC) Code: 5311, Fuselage Main, Frame.

**(i) Material Incorporated by Reference.**

(1) The Director of the Federal Register approved the incorporation by reference (IBR) of the service information listed in this paragraph under 5 U.S.C. 552(a) and 1 CFR part 51.

(2) You must use this service information as applicable to do the actions required by this AD, unless the AD specifies otherwise.

(i) Eurocopter Emergency Alert Service Bulletin No. 05.00.57, Revision 1, dated March 31, 2010.

(ii) Eurocopter Emergency Alert Service Bulletin No. 05.39, Revision 1, dated March 31, 2010.

Note 1 to paragraph (i)(2): Eurocopter Emergency Alert Service Bulletin (EASB) Nos. 05.00.57 and 05.39, both Revision 1, and both dated March 31, 2010, are co-published as one document along with Eurocopter EASB No. 05.00.25, Revision 1, dated March 31, 2010, which is not incorporated by reference in this AD.

(3) For Eurocopter service information identified in this AD, contact American Eurocopter Corporation, 2701 Forum Drive, Grand Prairie, Texas 75053-4005; telephone (800) 232-0323; fax (972) 641-3710; or at <http://www.eurocopter.com>.

(4) You may view this service information at FAA, Office of the Regional Counsel, Southwest Region, 2601 Meacham Blvd., Room 663, Fort Worth, Texas 76137. For information on the availability of this material at the FAA, call (817) 222-5110.

(5) You may view this service information that is incorporated by reference at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call (202) 741-6030, or go to:

<http://www.archives.gov/federal-register/cfr/ibr-locations.html>.

Issued in Fort Worth, Texas, on April 12, 2013.

Lance T. Gant,

Acting Directorate Manager, Rotorcraft Directorate,  
Aircraft Certification Service.

